

**NOVEMBER/DECEMBER 2023**  
**23UIM11 — PROGRAMMING IN C**

Time : Three hours

Maximum : 75 marks



**SECTION A — (10 × 2 = 20 marks)**

Answer ALL questions.

1. What is a keyword? Give examples.
2. What is a token? What are the different tokens available in C?
3. What are bitwise operators? Give example.
4. Write the syntax of switch statement.
5. Define an array.
6. How do you initialize a 2-D array? Give an example.
7. Write the syntax of structure.
8. Define Union. Give example.
9. What is a Pointer?
10. What are the Different file operations?



SECTION B — ( $5 \times 5 = 25$  marks)

Answer ALL questions.

11. (a) Explain with example, the various constants available in C.

Or

- (b) What are the basic data types available in C? Write the significance of each data type.

12. (a) Write short notes on Unconditional jump statement with an example.

Or

- (b) What is a string? Write a C Program to demonstrate character array.

13. (a) What is nesting of functions? Give example.

Or

- (b) Explain the concept of recursion with an example.

14. (a) Give five differences between structure and Union.

Or

- (b) Explain how arrays of structures are used in C. Give example.

15. (a) Write about different file modes.

Or

- (b) Define pointer. How to declare and initialize it.



SECTION C — ( $3 \times 10 = 30$  marks)

Answer any THREE questions.

16. Explain the basic structure of a C program with example.

17. Discuss the different kinds of loops available in C with examples.

18. Explain the concepts – call by value and call by reference with an example.

19. Explain how structures within structures are used? Give example.

20. Explain the following file handling functions:

(a) fseek() (b) ftell()

(c) rewind() (d) feof()